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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/427,031  | 10/26/1999  | H. PAUL HOLZWORTH    | 1011.1018/MJ        | 2648             |
| 21171   | 7590        | 01/11/2005           | EXAMINER            |                  |
| STAAS & HALSEY LLP<br>SUITE 700<br>1201 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | LEE, CHI HO A       |                  |
|   |             | ART UNIT             |                     | PAPER NUMBER     |
|   |             |                      |                     | 2663             |

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                                       |
|------------------------------|------------------------|---------------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>                   |
|                              | 09/427,031             | HOLZWORTH ET AL.<br><i>[initials]</i> |
|                              | <b>Examiner</b>        | <b>Art Unit</b>                       |
|                              | Andrew Lee             | 2663                                  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 December 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 2,3,6-14,21,25-27,29,31-34,37-43,50,54-56,58,60-63,66-72,79,83-85 and 87 is/are allowed.
- 6) Claim(s) 1,15-20,22-24,28,30,44-49,51-53,58,59,73-78,80-82,86 and 88 is/are rejected.
- 7) Claim(s) 4,5,35,36,64 and 65 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. ____ .   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: ____ .                                   |

## DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,15-17, 30, 44-49, 59 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramamurthy U.S. Patent Number 6,046,981 in view of Srinivasan et al U.S. Patent Number 6,304,549.

Re Claims 1, 30, 59 and 88, fig. 1 teaches a CAC (an admission control device) for plurality classes for ATM service that includes a number of VBR connections, wherein the CAC assigns equivalent bandwidths (an EBW device) to plurality of VBR connections (See col. 11, lines 24-29); further teaches determining new equivalent bandwidths (increasing or reducing) to the according to equation (21) wherein the new rate is based on the various parameters in the equation (a scaling factors: a scaling unit) (See col. 12, lines 15-32); further teaches the maximum waiting time for cells and depending of the QoS guarantee of CDV, a equivalent bandwidth is recalculated based on the substitution of the parameter (adjusting the scaling factor); fig. 2 teaches in fig. 2, step 240 of determining whether to accept or refuse a new VBR connection (See col. 5, lines 1 +).

Ramamurthy fails to explicitly teach “the adjustment being made by a switch operator”.

Srinivasan et al teaches a Switch management function 80, CAC, for programming parameters such as rate control are performed by switch resource server 75 (See col. 6, lines 12-26) wherein the set up is based on requests by a network administrator (See col. 8, lines 34-45). Fig. 6 of Srinivasan et al teaches how the VPC can be monitored by a request from a network administrator to configure the switching fabric (See fig. 7, step 225). One skilled in the art would have been motivated by Srinivasan et al to include a network administrator to modify the scaling factor of Ramamurthy based on the bandwidth management function of the resource server 75. In so doing, the CAC of Ramamurthy can respectively be configured to accommodate for new resource allocations. Therefore, it would have been obvious to one ordinary skilled to incorporate the teaching of Srinivasan et al into the teaching of Ramamurthy.

Re Claims 15, 44, 47, Ramamurthy teaches a CAC for summing the existing and new CBR sources (See fig. 2) and determining additional capacity (the maximum factor) to ensure the QoS requirements (See col. 9, lines 1-45).

Ramamurthy fails to explicitly teach “the adjustment being made by a switch operator”.

Srinivasan et al teaches a Switch management function 80, CAC, for programming parameters such as rate control are performed by switch resource server 75 (See col. 6, lines 12-26). In particular, Srinivasan et al teaches by connection servers may be set up based on requests by a network administrator for configuring the

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parameters to control the rate (See col. 8, lines 34-45). One skilled in the art would have been motivated by Srinivasan et al to include a network administrator to modify the scaling factor of Ramamurthy based on the bandwidth management function of the resource server 75.

Re Claims 16, 45, 48, refer to claim 15, the switch parameter configuration are performed on-line (See col. 7, lines 55-68).

Re Claims 17, 46, 49, refer to fig. 2, step 240, wherein the CAC determines to accept or refuse the new CBR based on whether the sum exceeds the bandwidth available to the CBR.

4. Claims 18-20, 22-24, 28, 51-53, 58, 73-78, 80-82, 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yin et al U.S. Patent Number 6,442,138 in view of Srinivasan et al U.S. Patent Number 6,304,549.

Re Claims 18, 28, 58, 73, 76, 86, fig. 4 teaches a CAC (an admission control device) that sums existing and new CBR requests to determine whether  $A_{new}$  exceeds  $f(1)*B(1)$  (a maximum factor) (See col. 8, lines 21-50). Yin et al further teaches that the  $f(i)$  allocation factor may be changed in response to measure traffic flow for CBR class (See col. 7, lines 15-60), wherein the allocation factor  $f(i)$  indicates whether the associated class is fully booked, under-scribed. One skilled in the art would have been motivated to reduce the allocation factor for the CBR class when there is an fully booked to permit under-subscription to the CBR class.

Yin et al fails to explicitly teach "the adjustment being made by a switch operator".

Srinivasan et al teaches a Switch management function 80, CAC, for programming parameters such as rate control are performed by switch resource server 75 (See col. 6, lines 12-26). In particular, Srinivasan et al teaches by connection servers may be set up based on requests by a network administrator for configuring the parameters to control the rate (See col. 8, lines 34-45). One skilled in the art would have motivated Srinivasan et al to allow the network administrator to configure the allocation factor in Yin et al for bandwidth efficiency. Therefore, it would have been obvious to one ordinary skilled to incorporate the teaching of Srinivasan et al into the teaching of Yin et al.

Re Claims 19, 24, 53, 74, 77, 78, 82, refer to claim 15, the switch parameter configuration are performed on-line (See col. 7, lines 55-68).

Re Claim 20, 75, refer to fig. 4, step 76, wherein the CAC determines to accept or refuse the new CBR based on whether the sum exceeds the bandwidth available to the CBR.

Re Claims 22, 51, 80, Yin et al further teaches that the  $f(i)$  allocation factor (SCR factor) may be changed in response to measure traffic flow for each class, this includes UBR service class and parameter SCR. Yin et al teaches (See col. 7, lines 15-60) the allocation factor  $f(i)$  (SCR factor) for UBR class can be adjusted in response to the measured traffic flow.

Re Claims 23, 52, 81, it is known to one skilled that the UBR service offers no guarantee bandwidth and the switch accepts a UBR connection request only when a

bandwidth of X % of the declared PCR can be reserved (See col. 4, lines 33-47 of U.S. Patent Number 6,282,197).

***Allowable Subject Matter***

5. Claims 4, 5, 35, 36, 64, 65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1,15-17, 30, 44-49, 59 and 88, 18-20, 22-24, 28, 51-53, 58, 73-78, 80-82, 86 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 571-272-3130

The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AI ANDY LEE  
9/2/04 EXAMINER